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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,619	12/05/2003	Yijia Bao	SP01-208A	2934
22928	7590	10/13/2006	EXAMINER	
CORNING INCORPORATED			WHISENANT, ETHAN C	
SP-TI-3-1			ART UNIT	PAPER NUMBER
CORNING, NY 14831			1634	

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/729,619	BAO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ethan Whisenant, Ph.D.	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 24-35 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-33 and 35 is/are allowed.
- 6) ☒ Claim(s) 1-7, 27-29 and 34 is/are rejected.
- 7) ☒ Claim(s) 24-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **FINAL ACTION**

1. The applicant's response (filed 12 JUL 06) to the Office Action has been entered. Following the entry of the claim amendment(s), **Claim(s) 1-7 and 24-35** is/are pending. Rejections and/or objections not reiterated from the previous office action are hereby withdrawn. The following rejections and/or objections are either newly applied or reiterated. They constitute the complete set presently being applied to the instant application.

### **LISTING OF THE CLAIMS**

2. It needs to be noted that the Listing of the claims is improper in that there is no indication as to the status of Claims 8-23. See CFR 1.121 wherein it states "In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered)." It is further noted that Claims 8-23 were canceled in the preliminary amendment filed 05 DEC 03. This paragraph is included only to remind the applicant of the "new" rules. Failure to comply with these "new" rules can result in delays in the prosecution of an application.

### **35 USC § 112- 2nd Paragraph**

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

### **CLAIM REJECTIONS under 35 USC § 112- 2ND PARAGRAPH**

**4. Claim(s) 34** is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 34** is indefinite because the phrase “the borohydride” lacks proper antecedent basis in Claim 30.

### **35 USC § 102**

**5.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that may form the basis for rejections set forth in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

**6.** The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

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Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

### CLAIM REJECTIONS UNDER 35 USC § 102

7. **Claim(s) 1-7 and 27-29** is/are rejected under 35 U.S.C. 102(b) as being anticipated by Broeker et al.[ US 5,718,898 (1998)].

Broeker et al. teach a method of immobilizing biomolecules on a surface of a substrate comprising all of the limitations recited in Claims 1-5, 27-29. See especially the paragraph bridging Columns 8-9.

### RESPONSE TO APPLICANT'S AMENDMENT/ ARGUMENTS

8. Applicant's arguments with respect to the claimed invention have been fully and carefully considered but are not deemed to be persuasive.

To begin, the applicant argues that nitrocellulose is an organic material and that the arrays of the invention are composed of inorganic materials. In response the examiner notes that there is no limitation in Claims 1-7 that the arrays be composed of inorganic materials. Please note that while the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. *In re Van Guens*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant also traverses the rejection of Claims 1-7 over Broeker et al. arguing that the nitrocellulose strips are not arrays. The applicant also defines an array as "a collection of spots composed of biomolecules attached to a solid surface." The examiner respectfully disagrees. Broeker et al. teaches transferring **antigens** from gels to nitrocellulose sheets. Although it is not explicitly disclosed by Broeker et al. that

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multiple different antigens are transferred the examiner asserts that this limitation is inherent to the method disclosed by Broeker et al. because the samples loaded onto the gels of Broeker et al. were composed of whole cell extracts. In summary, the examiner asserts that there are no limitations in Claims 1-7 and 27-29 which distinguish the claimed method of immobilizing biomolecules on a surface of an array substrate from that disclosed by Broeker et al.

Finally the 102(e) rejection which relied upon Lee [WO 02/33412 (Intl. Filing Date: 31 May 2001)] has been withdrawn in light of the Rule 131 declaration filed

#### CLAIM OBJECTIONS

9. **Claim(s) 24-26** is/are objected to because they are dependent upon a rejected independent base claim.

#### ALLOWABLE SUBJECT MATTER

10. **Claim(s) 30-33 and 35** are allowable over the prior art considered and now of record. In addition, **Claim(s) 34** would appear to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph set forth in this Office action.

#### CONCLUSION

11. **Claim(s) 30-33 and 35** is/are allowable while Claim(s) 1-7, 24-29 is/are rejected and/or objected to for the reason(s) set forth above.

12. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

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A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

**13.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ethan Whisenant, Ph.D. whose telephone number is (571) 272-0754. The examiner can normally be reached Monday-Friday from 8:30AM - 5:30PM EST or any time via voice mail. If repeated attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached at (571) 272-0735.

The Central Fax number for the USPTO is (571) 273-8300. Please note that the faxing of papers must conform with the Notice to Comply published in the Official Gazette, 1096 OG 30 (November 15, 1989).

  
**ETHAN WHISENANT**  
**PRIMARY EXAMINER**  
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